#21a DJ 02-09-01

IN THE SPECIFICATION

At page 1, lines 5-6, please delete [continuation-in-part application of copending] and replace with divisional application of copending United States application Serial No. 09/194,285, filed April 12, 1999, which is based on.

IN THE CLAIMS

Please cancel claims 1-32, 61-84, 92-99, and 104-113.

Please add new claims 114-140.

--114. The method of claim 85 wherein the support is a cell fragment.

115. The method of claim 85 wherein the support is a cell.

116. The method of claim 115 wherein the cell is an insect cell.

117. The method of claim 116 wherein the insect cell is selected from the group consisting of Spodoptera and Drosophila.

118. The method of claim 115 wherein the extracellular portion of the MHC molecule is linked to the cell by a transmembrane domain of the MHC class II heterodimer.

119. The method of claim 85 wherein the support is a liposome.

120. The method of claim 85 wherein the support is a solid surface.

121. The method of claim 85 wherein the extracellular portion of the MHC class II heterodimer is linked to an epitope which reacts with an antibody to link the portion to the support.

122. The method of claim 85 wherein the extracellular portion of the Class II MHC heterodimer is linked to $(His)_6$ which reacts with nickel to link the portion to the support.

123. The method of claim 85 wherein the support is a porous material.

124. The method of claim 85 wherein the peptide is loaded onto the extracellular portion of the MHC class II heterodimer.

125. The method of claim 85 wherein the extracellular portion of the MHC class II heterodimer is empty.

126. The method of claim 85 wherein the matrix further comprises a first accessory molecule and a second accessory molecule.

127. The method of claim 126 wherein the first accessory molecule is a costimulatory molecule and the second accessory molecule is an adhesion molecule.

128. The method of claim 127 wherein the costimulatory molecule is B7.1 or B7.2 and the adhesion molecule is ICAM-1.

129. The method of claim 126 wherein the first accessory molecule is a costimulatory molecule and the second accessory molecule is a survival molecule.

130. The method of claim 126 wherein the first accessory molecule is a survival molecule and the second accessory molecule is an adhesion molecule.

131. The method of claim 130 wherein the survival molecule is CD70 and the adhesion molecule is ICAM-1.

132. The method of claim 126 wherein the first and second accessory molecules are costimulatory molecules.

133. The method of claim 132 wherein the first and second costimulatory molecules are B7.1 and B7.2.

134. The method of claim 126 further comprising a third accessory molecule.

135. The method of claim 134 wherein the first accessory molecule is a costimulatory molecule, the second accessory molecule is an adhesion molecule, and the third accessory molecule is a survival molecule.

136. The method of claim 135 wherein the costimulatory molecule is B7.2, the adhesion molecule is ICAM-1 and the survival molecule is CD70.

137. A method for activating $CD4^+$ T cells in vitro, the method comprising:

a) contacting a synthetic antigen presenting matrix according to claim 33 with a peptide library in vitro for a sufficient time to generate a peptide-loaded MHC class II heterodimer for activating $CD4^+$ T cells; and

b) contacting the peptide-loaded MHC class II heterodimer of step a) with $CD4^+$ T cells, thereby inducing the contacted $CD4^+$ T cells to proliferate and differentiate into activated $CD4^+$ T cells.

138. The method of claim 137 further comprising:

c) separating the activated $CD4^+$ T cells from the APC.

139. The method of claim 138 further comprising the step of adding the activated $CD4^+$ T cells to an acceptable carrier or excipient to form a suspension.

140. The method of claim 139 further comprising the step of administering the suspension to a patient.--

REMARKS

Claims 1-32, 61-84, 92-99, and 104-113 have been cancelled and new claims 114-140 have been added. Claims 33-60, 85-91,